

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number
WO 2005/092838 A1

(51) International Patent Classification⁷: **C07C 229/22**,
A61K 31/195

(74) Agent: **FRANK B. DEHN & Co.**; 179 Queen Victoria
Street, London EC4V 4EL (GB).

(21) International Application Number:
PCT/GB2005/001236

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(22) International Filing Date: 29 March 2005 (29.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0406917.5 26 March 2004 (26.03.2004) GB

(71) Applicant (for all designated States except US): **PHOTO-
CURE ASA** [NO/NO]; Hoffsvæien 48, N-0377 Oslo (NO).

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

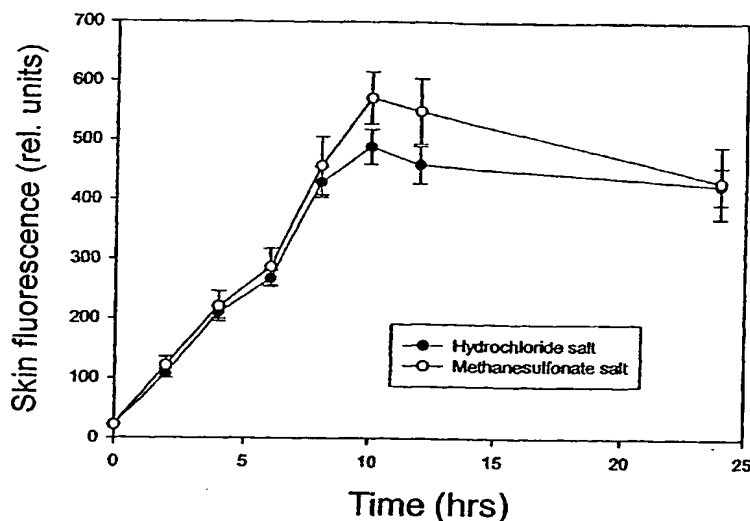
(75) Inventors/Applicants (for US only): **BRAENDEN, Jon**,
Erik [NO/NO]; Kjelsåsveien 95 D, N-0491 Oslo (NO).
GODAL, Aslak [NO/NO]; Gaustadveien 77, N-0372 Oslo
(NO). **NILSEN, Nils, Olav** [NO/NO]; Luftfartsveien 8,
N-0770 Oslo (NO). **KLAVENESS, Jo** [NO/NO]; Midtåsen
5, N-1166 Oslo (NO).

Published:

— with international search report

[Continued on next page]

(54) Title: ACID ADDITION SALTS OF 5-AMINOLEVULINIC ACID OR ITS DERIVATIVES



(57) Abstract: The present invention provides an acid addition salt of 5-aminolevulinic acid (5-ALA) or of a 5-ALA derivative (e.g. a 5-ALA ester) with an acid which has a pKa of about 5 or less, preferably about 3 or less, with the proviso that the acid is other than hydrochloric acid. Particularly preferred salts are those derived from acids selected from the group comprising sulphonic acid and its derivatives, hydrobromic acid, sulfuric acid, nitric acid and phosphoric acid. The salts in accordance with the invention are particularly suitable for use as photosensitizing agents in diagnosis and photochemotherapy of disorders or abnormalities of external or internal surfaces of the body.

8 v 839762915

WO 2005/092838 A1



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.